WarpStock Europe 2011

Java 6 for eCS (OS/2)

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Idea on porting Java 6

- In the beginning of 2010, discussions started whether a new Java would make sense.

- The conclusion was: Yes, it makes sense as more and more apps are not working anymore with our current Java.

- As Sun also provides an OpenJava version we could use the sources.

Team

- ## Management

  - ### Silvan Scherrer

    - With Warp 3 releases I started using OS/2. Right now I work as chief technical officer at AROA Informatik AG. At early 2008 I started to port software to OS/2 on opensource projects like Samba, Lucide, Smplayer, QBittorrent and many others. I also work as projectmanager for Qt4 port, OpenJDK6 and some smaller projects.

- ## Developer

  - ### Dmitriy Kuminov

    - Dmitriy has been in the OS/2 world since 1995 when he started to use it as a server machine for the school network where he worked as a teacher. In 2004, with the assistance of netlabs.org, he was hired by a Norwegian company and ported the Qt graphical toolkit version 3 to OS/2. Afterwards for almost five years he worked at InnoTek (and then at Sun) on the VirtualBox project. In 2009, he was hired by netlabs.org again to port Qt4 and then OpenJDK 6 to OS/2. His current responsibilities are working on the OpenJDK port and providing support for the Qt4 port.

- ## Tester

  - ### Various persons

Sponsoring part 1

- As every project with a fulltime developer needs money, I started to collect it.

- First I asked Mensys, whether they were willing to pay about 2/3 of the money. Luckily they agreed.

- The rest of the money was at firsthand covered by a anonymous sponsor. But he decided to sponsor the money to a different project. So we lost that money for Java, but not the money itself.

- Next, I opened another sponsoring account at Mensys, like I did with Qt4 already, and announced it on various news portals.

Sponsoring part 2

- Community

  - until now they sponsored around € 6000.
  - it's hard to collect money for Java it seems.
  - some possible reasons:
    - Java is not that important.
    - the community is tired of sponsoring.
    - ....

- Mensys

  - they cover the 2/3 of the costs as agreed.
  - as the project requires more time than estimated, they will cover the gap.

Decision Native vs. Odin part 1

- Native

  - Native port based on the Golden Code Development work:
    - we spoke with them and got a very big price quote.
    - so this was the end of the GCD way.

  - Native new port:

    - we estimated it and the time needed was >12 month.
    - so we first wanted to try an Odin based way.
    - if Odin based would not work we would come back to a native port.

Decision Native vs. Odin part 2

- Odin based

  - first of all Odin based is not Odinized.
  - Odinized:
    - uses and runs Windows dll and executables.
    - only Odin itself is available in source.
    - no way of fixing problems in the app itself.

  - Odin based:
    - uses the source code of the app and is built natively.
    - it uses Odin for PM handling.
    - problems can be debugged and fixed where they occur (i.e. in Java or in Odin).
    - faster porting, as Odin already delivers the PM handling.

  - we estimated a porting timeframe of around 10 or less month.
  - positive sideeffect if Odin based project is chosen:
  - every Odin bug we fix will help other Odin based or Odinized apps.
  - easier integration of SWT based apps like Eclipse.

Roadmap part 1

- ## Core (ended at 5th September 2010)
  - the main goal was:
    - port the JDK core to make console applications work.

  - initial target was 31st July 2010.
  - due to HotSpot and Odin patches we had to shift it approximately for 6 weeks.

- ## Alpha (ended at 1st October 2010)
  - the main goal was:
    - initial version that may run some console applications.

  - initial target was 1st October 2010.
  - no big problems as most where already done for Core.

- ## Swing core (ended at 13th December 2010)
  - the main goal was:
    - port the basics of Swing Core to bring the GUI.

      - initial target was 1st November 2010.
      - this milestone was dismissed in favor of Beta.
      - it turned out to be more work with AWT and Odin than with Swing.

Roadmap part 2

- ## Beta (ended at 30st December 2010)
  - the main goal was:
    - all basic components ported including GUI (Swing) functionality.
  - initial target was 30st November 2010.
  - as AWT and Odin took more time we found us around 4 weeks behind the schedule.
  - we had to shift the further milestones.

- ## Beta2 (ended at 12th January 2011)
  - this milestone was initially not planned.
  - due to critical Beta bugs it was needed.
  - the main goal was:
    - fixes critical issues found in Beta.

- ## RC (ended at 21st February 2011)
  - the main goal was:
    - GA version that is ready for deployment and is able to run most Java applications. (some OS/2 specific restrictions may still apply)
  - initial target was 1st February 2011.
  - this milestone was renamed to RC (release candidate) to give it more testing.
  - there was only one major issue by this time: hangs on SMP machines.

Roadmap part 3

- ## RC2 (ended at 28th March 2011)
  - this milestone was initially not planned.
  - due to some RC bugs is was needed.
  - the main goal was:
    - fixes issues found in RC.
    - update to latest OpenJava6.

- ## GA (TBA)
  - the main goal is:
    - GA version that is ready for deployment and is able to run most Java applications.
    - fix most SMP related problems.
  - the SMP problems we face are pure Odin problems.
  - Special benefit of the Odin based approach (as anticipated):
  - Flash 10 works way more stable on SMP systems now, because most SMP bugs
  - are fixed in Odin now and Flash 10 suffered from the same bugs.

- ## Enhanced (TBA)
  - the main goal is:
    - Mozilla plugin
    - Java WebStart

Running Java applications

- some will be shown later in the Demo part.

  - jEdit
  - genealogyj
  - jAlbum
  - smartSVN
  - iTrain
  - FreeCol
  - ZeroToaster MTA
  - ...

Future

- as we still believe in eCS (OS/2), we already think and work on followup pro-jects.

  - ## Flash 10
    - based upon our knowledge with Odin we will try to get Flash 10 more stable.
    - updating to latest Flash (if possible).
    - Note: This will be an Odinized port.

  - ## Qt4
    - update the current port of Qt4 to 4.7
    - an alpha version is already running.

  - ## Qt Creator
    - as soon as Qt4 4.7 is done, we will port the latest Qt Creator 2.
    - Qt Creator is a exciting new IDE, that we really need, as we don't have anything modern right now.

Demo

- Now its time to show some applications :)

Questions

- We are glad to answer your questions

References

- if you find bugs in our projects, please visit the below web-sites, they explain how to open a ticket.

- to sponsor our projects see the below websites. "WE STILL NEED MONEY"

- if we collect more money than needed for one project, we transfer it to a followup project.

- Java6
  - http://svn.netlabs.org/java

- Qt4
  - http://svn.netlabs.org/qt4
  - http://svn.netlabs.org/qtapps